

TEACHERS' RETIREMENT BOARD  
BENEFITS AND SERVICES COMMITTEE MEETING

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SUBJECT: Cash Balance Benefit  
Program Annuity Rate Assumption

ITEM NUMBER: 4

ATTACHMENT(S): 2

ACTION: X

MEETING DATE: April 8, 1999

INFORMATION:     

PRESENTER: Mr. Derman

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**SUMMARY**

Participants in the Cash Balance Benefit Program are allowed to receive their benefit in the form of an annuity, if the balance of the participant's and his or her employer's account is at least \$3,500. Currently no annuities are being paid from the Cash Balance Benefit Program. There are, however, a few Cash Balance Benefit Program participants with sufficient balances in the employee account and employer account to qualify for an annuity under the Cash Balance Benefit Program.

The annuity is determined as a value actuarially equivalent to the sum of the employee account and the employer account as of the retirement date, and is calculated using the age of the participant and, if the participant elected a joint and survivor option, the age of the beneficiary on the retirement date.

Section 26101 specifies that the actuarial equivalent is based on interest rates and mortality tables recommended by the actuary and adopted by the board as a plan amendment. The Consulting Actuary, Watson Wyatt & Company, recommends the use of the interest rate and mortality table developed for the Defined Benefit Program actuarial equivalence factors until the experience analysis for the Cash Balance Benefit Program is performed, which will be undertaken using June 30, 1999 data.

For the interim period, until the experience analysis for the Cash Balance Benefit Program is performed, the Consulting Actuary recommends using an 8% interest rate assumption. This is the same rate assumed for the Defined Benefit Program.

An annuity based on an 8% interest rate compares favorably with private market annuities, which currently are based on a rate of around 5.5%.

**RECOMMENDATION**

The staff recommends that the Teachers' Retirement Board adopt the interest rate assumption of 8% for the Cash Balance Benefit Program annuities effective immediately and for the 1999 – 2000 fiscal year.



February 10, 1999

Attachment 1  
Benefits & Services Cmte. – Item  
April 8, 1999

Watson Wyatt & Company

Suite 700  
15303 Ventura Boulevard  
Sherman Oaks, CA 91403-3197  
Telephone 818 906 2631  
Fax 818 906 2097

Mr. Ed Derman  
Chief, Legislative and Actuarial Services Division  
California State Teachers' Retirement System  
7667 Folsom Boulevard  
Sacramento, CA 95826-2614

RE: Cash Balance Program Actuarial Equivalence

Dear Ed:

The Cash Balance program staff asked Watson Wyatt to develop various actuarial equivalence factors to allow the staff to determine annuities that participants may elect under this program.

Section 26101 of the Teachers' Retirement Law indicates that actuarial equivalence under the Cash Balance program is based on interest rates and mortality tables recommended by the actuary and adopted by the Board as a plan amendment.

We present in this letter our recommendations for setting the actuarial equivalence factors for this program.

Actuarial equivalence factors need to reflect the actuary's best estimate of future asset returns and mortality experience, taking into account the plan's long-term nature. And by law, the factors need to be unisex. An experience analysis would point to the appropriate interest and mortality table assumptions for developing the actuarial equivalence factors. However, an experience analysis for this program will not be performed until June 30, 1999.

Thus, for the interim period, we propose using an 8% interest assumption and the 1983 Group Annuity Mortality Table (three-year setback on the male table, for males; one-year setback on the female table, for females) with 50% male / 50% female weighting of the mortality rates.

The recommended interest rate and mortality table are the same as those used to develop the Defined Benefit program actuarial equivalence factors.

We believe an 8% interest assumption is appropriate for the Cash Balance program, although the valuation interest rate for the program as of June 30, 1998 is 6.5%. The Cash Balance program valuation interest rate is not appropriate for actuarial equivalence purposes since it was set to reflect the short-term liquidity requirements of this program. The 8% valuation interest rate for the Defined Benefit program represents the long-term assumption for those assets, and we feel it is appropriate to use it for the actuarial equivalency basis for the Cash Balance Program as well.

Mr. Ed Derman  
February 10, 1999  
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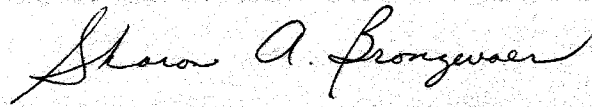


The gender weighting for the mortality rates approximates the current make-up of the Cash Balance program active participants. As experience under this program develops, we will continue to refine this weighting.

Let us know if these recommendations meet Board approval, so we can proceed to developing the actuarial equivalence factors.

If you have any questions, give us a call.

Sincerely,

A handwritten signature in cursive script that reads "Sharon A. Bronzwaer".

Sharon A. Bronzwaer, FSA  
Consulting Actuary

JCO:SAB

c: W. Michael Carter, Watson Wyatt  
Judy C. Ocaya, Watson Wyatt

PROPOSED  
RESOLUTION  
OF THE  
TEACHERS' RETIREMENT BOARD  
BENEFITS AND SERVICES COMMITTEE

SUBJECT: Adoption of Cash Balance Benefit Program Annuity Rate Assumption  
Effective immediately and for the 1999/2000 Fiscal Year

RESOLUTION NO. \_\_\_\_\_

WHEREAS, the Teachers' Retirement Law specifies that the Cash Balance Benefit Program annuities are based on the actuarial equivalent of values determined using interest rates and mortality tables recommended by the actuary and adopted by the Board as a plan amendment; and

WHEREAS, the first experience analysis of the Cash Balance Benefit Program will be undertaken with June 30, 1999 data; and

WHEREAS, the Consulting Actuary has recommended that, until an experience analysis of the Cash Balance Benefit Program is under taken, the interest rate assumed for the Defined Benefit Program be used to determine the actuarial equivalent of Cash Balance Benefit Program account balances; and

WHEREAS, the interest rate assumption for the Defined Benefit Program is 8%; therefore, be it

RESOLVED that the Benefits and Services Committee recommends that the Teachers' Retirement Board adopts the interest rate assumption of 8% effective immediately and for the 1999 – 2000 fiscal year.

Adopted by:  
Benefits and Services Committee

Ratified by:  
Teachers' Retirement Board

on April 8, 1999

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James D. Mosman  
Chief Executive Officer